App. Ser. No. 10/661,769

Atty. Dkt. No.: 080404.52663US

PATENT

REMARKS

Claims 1-28 are currently pending in the present Application.

The Applicants wish to express their appreciation for the Examiner's allowance of claims 1-21.

As to the remaining claims, the Applicants have canceled method claims 27-28, without prejudice to the subject matter therein, in order to advance with case to issue. In addition, duplicate claim 25 has also been canceled.

As to claims 22-24 and 26, the Applicants respectfully traverse the rejections based on European Patent No. EP 0 600 321 B1 ("EP '321"), on the grounds that this reference fails to disclose or suggest the features of the present invention.

1. The Claims Are Patentable Over EP '321.

Independent claims 22 and 23 recite, *inter alia*, a truss girder in which "two track girders [form] two sides of a triangle with a triangle base extending between lower ends of the track girders," and "transverse girders fitted through and positioning said lower ends with respect to one another." Thus, as shown in Fig. 2, the transverse girders not only form the foundation for the roadway portion of the bridge, they also hold the lower ends of the truss planes apart and thereby form the lower base of the truss triangle.

The EP '321 reference fails to disclose or suggest such an arrangement.

As a first matter, EP '321 does not disclose a triangle, but rather a trapezoidal truss arrangement. Rather than having the common top chord of the present invention, EP '321 teaches two upper chord profiles 13 separated a short

App. Ser. No. 10/661,769 Atty. Dkt. No.: 080404.52663US

PATENT

distance from one another by a clamping bracket 17. Thus the planes of the two EP '321 truss walls 11, 12 are not arranged to be "forming two sides of a triangle," as claimed. This difference has direct ramifications concerning the strength of the bridge (as well as other factors, such as cost). The present invention's triangle arrangement is a very stable construction, with the triangle maintaining its shape under even very heavy loads. In contrast, the trapezoidal cross-section, having four sides has a residual degree of freedom which significantly reduces its load-carrying ability. Under heavy loads, deformation of the truss cross section is likely to occur as transverse forces tend to drive the two upper chords apart. Indeed, if clamp 17 fails, the trapezoid could open, potentially leading to collapse of the entire bridge.

The EP '321 trapezoidal configuration also has logistical disadvantages as compared to the bridge trusses recited in claims 22 and 23. With the present bridge, the recited "hinge connecting upper portions of the two track girders together" facilitates very rapid folding together of the two track girders when the bridge is taken down (and conversely, rapid deployment during construction) – speed which can be a critical concern during time-sensitive operations.

Importantly, this take-down and assembly can be accomplished in the field without tools. In addition, the broken-down truss sections have a low profile, minimizing their volume on a transport vehicle, thereby further minimizing logistics needs.

In comparison, dismantling of the EP '321 bridge requires the timeconsuming deployment of personnel with tools to loosen the screws securing the

App. Ser. No. 10/661,769 Atty. Dkt. No.: 080404.52663US

PATENT

clamp 17, and either the clamps 17 must be removed and stored separately (creating the potential for loss of parts), or the folded truss planes must be stored with the clamps still installed, increasing the required storage space as compared to the present invention. The EP '321 design also requires extensive disassembly of the transverse components, such as removal of fasteners 25 from suspension rod 21 and removal of suspension rod 22.

Finally, the EP '321 arrangement of its roadway bed and its connection to its trusses is completely unlike that of the bridge recited in claim 23. The pending Office Action cites Figs. 3 and 4 as disclosing as the claimed transverse girders "fitted through and positioning said lower [truss chord] ends with respect to one another." Claim 23, however, requires not only that the transverse girders fit through and position the lower ends of the trusses, but also that they span between the sides of the bridge (*i.e.*, the roadway planks are "transverse to and supported at the transverse girders to form the bridge roadway"). As shown in EP '321 Fig. 4, however, the element 18 spanning each truss triangle does not extend between the sides of the bridge to support the roadway. Conversely, the elements forming the roadway 23, 24, which are suspended from rods 21, 22, do not "position[] said lower ends with respect to one another," and further do not "fit[] through" the triangle.

In view of the foregoing, the Applicants respectfully submit that the EP '321 bridge fails to disclose or suggest several of the features of the present invention recited in the pending claims, and therefore fails to anticipate independent claims 22 and 23 under § 102(b). Further, because the Scuero

App. Ser. No. 10/661,769

Atty. Dkt. No.: 080404.52663US

PATENT

reference (U.S. Patent Publication No. US 2001/0002497 A1, cited for teaching

use of geocomposite materials) fails to provide any teachings regarding bridge

arrangements, no combination of EP '321 and Scuero can teach or suggest the

present invention under § 103(a). Accordingly, reconsideration and withdrawal

of the pending § 102(b) and § 103(a) rejections is respectfully requested.

CONCLUSION

The Applicants respectfully submit that claims 22-24 and 26 are in

condition for allowance. Early and favorable consideration, and issuance of a

Notice of Allowance for claims 1-24 and 26 is respectfully requested.

If there are any questions regarding this amendment or the application in

general, a telephone call to the undersigned would be appreciated since this

should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as

a petition for an Extension of Time sufficient to effect a timely response, and

please charge any deficiency in fees or credit any overpayments to Deposit

Account No. 05-1323 (Docket #080404.52663US).

Respectfully submitted,

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Donald D. Evenson

Registration No. 26,160

Mark H. Neblett

Registration No. 42,028

CROWELL & MORING, LLP

P.O. Box 14300

Washington, DC 20044-4300

Telephone No.: (202) 624-2500

Facsimile No.: (202) 628-8844

-12-